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Case Docket No.: 19052

Transmitted herewith for filing is the patent application of

Inventor: OPHER GODDARD AND MORDECHAI ABRAHAM

For: SYSTEM AND METHOD FOR FACILITATING AGGREGATE SHOPPING

Enclosed are:

☒ 1 sheets of informal drawing(s).

☐ An assignment of the invention to _____

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Respectfully,

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INDEPENDENT INVENTOR - NEW APPLICATION

Attorney Docket No.: 1905/2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In RE Application of: OPHER GODDARD AND MORDECHAI ABRAHAM

Filed Concurrently Herewith

For: SYSTEM AND METHOD FOR FACILITATING AGGREGATE SHOPPING

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As a below named Inventor, I hereby declare that:

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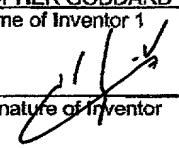Status : ☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

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I acknowledge the duty under 37 CFR 1.28(b) to file, in this application, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the issue fee due after the date on which status as a small entity is no longer appropriate.

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OPHER GODDARD
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Signature of Inventor

Date: Jan 16, 2000

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Name of Inventor 3

Signature of Inventor

AAA

Application Text

Place Papers behind this sheet in the following order:

1. Preliminary Amendment
2. Specification (English Language Only)
3. Claims
4. Abstract

SYSTEM AND METHOD FOR FACILITATING AGGREGATE SHOPPING

FIELD AND BACKGROUND OF THE INVENTION

The present invention relates to a system and method for facilitating electronic aggregate shopping and, more particularly, to a system which enables shoppers to set up or join shopping groups determined by a product desired thereby.

Shopping via electronic communication networks, especially the Internet, is fast becoming common practice among present day shoppers.

The Internet is considered the preferred new marketplace for a variety of products including goods and services. Using the Internet to conduct shopping affords buyers with numerous advantages. A shopper conducting transactions through the Internet can shop at any time during the day while enjoying the convenience of shopping from home or the office. In addition, since a shopper can readily access product information including pricing of a product sold by numerous retailers, price comparison can easily be effected for this product.

The proliferation of Internet mediated retail shopping has brought about the development of software shopping agents, commonly referred to as "smart agents". These software programs or modules are capable of self browsing the Internet and completing tasks according to a command provided by a user, thus enabling a user to receive information on a best price or selling terms of a specific product easily and rapidly. As such, these smart agents free the user from the tedious task of browsing through numerous electronic product catalogues.

Although Internet mediated shopping has proliferated tremendously during the past few years, several shopper advantages which can be provided through the use of this medium are yet to be exploited.

The Internet is a virtual community or collection of virtual communities of users which are inter linkable therebetween. For example, Internet chat groups of a specific subject matter gather a distinct and sometime geographically dislocated group of people sharing a common interest, which interest is embodied by the subject matter of this chat group. Thus, the Internet enables this group of people which share a common interest to intercommunicate, a situation which, in the absents of the Internet, could not be readily realized.

This unique quality of the Internet can be utilized to gather shoppers wishing to purchase a designated product into aggregate shopping groups.

Aggregate shopping provides shoppers with leverage against retailers. The buying power of a group of people enables to maneuver a retailer to a price point lower than or sale terms improved as compared to that offered to a single shopper, thus providing considerable savings and/or other advantages to the shoppers of this group.

Thus, the present invention is of a system and method for facilitating aggregate shopping, by enabling shoppers to set up or join shopping groups which are determined according to a product they wish to purchase or to a product offered thereto.

SUMMARY OF THE INVENTION

According to one aspect of the present invention there is provided a system for facilitating aggregate shopping, the system comprising (a) a database server system being for maintaining at least one shoppers group, the at least one shoppers group being characterized by a designated product and conditions for purchasing the designated product; and (b) a plurality of user clients, being at a disposal of a plurality of users and being capable of communicating with the database server system, each of the plurality of user clients being for enabling a respective user thereof to join the at least one shoppers group, such that a user of the plurality of users is entitled to purchase the designated product under the conditions for purchasing the designated product upon joining the at least one shoppers group.

According to another aspect of the present invention there is provided a method of facilitating aggregate shopping, the method comprising the steps of (a) establishing at least one shoppers group in a database server system; (b) maintaining the at least one shoppers group in the database server system, the at least one shoppers group being characterized by a designated product and conditions for purchasing the designated product; and (c) enabling a plurality of users each being capable of communicating with the database server system via a user client thereof to join the at least one shoppers group, such that upon joining, each user is entitled to purchase the designated product under the conditions for purchasing the designated product.

According to further features in preferred embodiments of the invention described below, the at least one shoppers group is established by a user of the plurality of users.

According to still further features in the described preferred embodiments the at least one shoppers group is established by an operator of the database server system.

According to still further features in the described preferred embodiments the at least one shoppers group is established by a supplier of the designated product.

According to still further features in the described preferred embodiments the plurality of user clients communicate with the database server system via a communication mode selected from the group consisting of dialup communication and local area network communication.

According to still further features in the described preferred embodiments the at least one shoppers group is maintained by the database server system for a predetermined period of time.

According to still further features in the described preferred embodiments the user can join the at least one shoppers group only during the predetermined period of time.

According to still further features in the described preferred embodiments a user is entitled to purchase the designated product following termination of the predetermined time period.

According to still further features in the described preferred embodiments the conditions for purchasing the designated product are determined as a function of the number of members within the at least one shoppers group at any time point either during the predetermined time period, or following termination of the predetermined time period.

According to still further features in the described preferred embodiments the database server system stores and provides on demand to each of the user clients information pertaining to the at least one shoppers group.

According to still further features in the described preferred embodiments information pertaining to the at least one shoppers group includes information on the designated product and to the conditions for purchasing the designated product.

According to still further features in the described preferred embodiments information pertaining to the at least one shoppers group

includes information on a number of members of the at least one shoppers group.

According to still further features in the described preferred embodiments information pertaining to the at least one shoppers group includes information on each member of the members of the at least one shoppers group.

According to still further features in the described preferred embodiments the conditions for purchasing the designated product include price of the designated products and terms of payment.

According to still further features in the described preferred embodiments the designated product is a specific product from a specific manufacturer.

According to still further features in the described preferred embodiments the designated product is a service.

According to still further features in the described preferred embodiments the designated product is characterized by a specification.

According to still further features in the described preferred embodiments the designated product includes a plurality of specific products bundled together as a single product package.

According to still further features in the described preferred embodiments each of the plurality of user clients is a computer operating a web browser and further wherein the database server system is in communication with the World Web.

According to still further features in the described preferred embodiments each of the user clients is a computer operating a dedicated software program.

According to still further features in the described preferred embodiments the supplier communicates with the database server system via a supplier client.

According to still further features in the described preferred embodiments the supplier client is a computer operating a web browser and further wherein the database server system is in communication with the World Wide Web.

According to still further features in the described preferred embodiments the supplier client is a computer operating a dedicated software program.

The present invention successfully addresses the shortcomings of the presently known configurations by providing system and method

which enable users thereof to enjoy the benefits afforded by aggregate shopping, while enabling suppliers to substantially increase sales of products.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention is herein described, by way of example only, with reference to the accompanying drawings. With specific reference now to the drawings in detail, it is stressed that the particulars shown are by way of example and for purposes of illustrative discussion of the preferred embodiments of the present invention only, and are presented in the cause of providing what is believed to be the most useful and readily understood description of the principles and conceptual aspects of the invention. In this regard, no attempt is made to show structural details of the invention in more detail than is necessary for a fundamental understanding of the invention, the description taken with the drawings making apparent to those skilled in the art how the several forms of the invention may be embodied in practice.

In the drawings:

FIG. 1 is a black box diagram of the system for facilitating aggregate shopping according to the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention is of a system and method which can be utilized to facilitate aggregate shopping of products on-line. Specifically, the present invention can be used to provide users with the ability to set up or join shoppers groups each characterized by a designated product and conditions of purchase of the designated product.

The principles and operation of a system and method for facilitating aggregate shopping according to the present invention may be better understood with reference to the drawings and accompanying descriptions.

Before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and the arrangement of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments or of being practiced or carried out in various ways. Also, it is to be understood that

the phraseology and terminology employed herein is for the purpose of description and should not be regarded as limiting.

Referring now to the drawings, Figure 1 illustrates the system of the present invention which is referred to herein as system **10**.

System **10** includes a database server system **12** which serves for maintaining at least one shoppers group. Preferably a shoppers group is maintained by database **12** for a predetermined time period, which can range from minutes to days and even weeks, during which time the shoppers group is considered active and can be joined by new members. Optionally, joined members can also remove themselves from an active shoppers group throughout the predetermined time period. The shoppers group is characterized by a designated product and conditions for purchasing the designated product. Thus, a plurality of shopper groups can be co-maintained by database **12**, wherein each shoppers group is characterized by a specific designated product and conditions for purchasing this designated product.

In addition, each shoppers group can further be characterized by for example, geographic location of its members (e.g.. shopper groups including members of a specific country, region or other) and other characteristics other than a designated product which may be used to differentiate between various groups.

The information characterizing each shoppers group and information which pertains to members thereof, such as personal profile information and the like is stored within database **12**. It will be appreciated that at least a portion of this information is also providable to users of system **10**, as further described hereinbelow, such information can be, for example, information pertaining to the designated product, conditions of purchase and the number of shoppers that have already joined a shoppers group at any given time.

System **10** further includes a plurality of user clients **14** (two are shown). Each specific user client **14**, is at a disposal of a user. User client **14** is capable of communicating with database server system **12** via for example, a dialup connection or a local area network as indicated by **16**.

User client **14** enables a respective user thereof to join a shoppers group by simply establishing communication with database **12** and by commanding database **12** to include the user in any active shoppers group of choice. It will be appreciated in this case that since joining a shoppers

group entitles a user with future benefits, a user identification process is effected such that only users which are registered with system **10** can access and join a shoppers group.

It will further be appreciated that a user can also be a business entity which, in a sense, can function as an individual within a shoppers group. As such "a shopper" or "a user" as used herein, can refer to an individual or a business entity.

Once becoming a member of a shoppers group, a user is entitled to purchase the designated product designating the shoppers group under conditions described therein. It will be appreciated, as has already mentioned hereinabove, that a user can also leave a shoppers group at any time during the predetermined time period.

Preferably, a user is entitled to purchase the product only following termination of the predetermined time period following which the shoppers group is considered inactive and thus no longer open to joining or leaving.

It will be appreciated, that conditions of purchase may change at any time during, or following the predetermined time period. which change may be a function of the number of members in a shoppers group and the quantity of the product demanded thereby. For example, if a certain price is set for a designated product of a group, which price applies with a condition that the group includes no less than, for example, 100 members, than in case where this group includes at the end of the predetermined time period less than 100 members the price set for the designated product can increase or alternatively the ability of this group to aggregate shop may be forfeited.

As used herein he term "product" refers to either goods or to services rendered. A product can be defined as a specific product such as, for example, a television set produced by a specific manufacturer, and as such defined by a catalog number, a year of manufacturing and the like, or in the case of a service, a specific service is a service rendered by a specific provider.

Alternatively, a product can be defined by a specification, which details the type of product, but not the manufacturer, or which details the type of product and a list of optional manufacturers. A product is defined by a specification when the manufacturer (brand name) is of less importance to the shopper. Such is the case with, for example, bulk quantities of A4 paper, pencils etc.. or even a PC computer. where a

specification (e.g., size of hard drive processor speed and the like) can define the product the shopper desires to buy is typically more important to the shopper than a brand name.

In the case of services, a service characterized by a specification is a service which is not unique to a single service provider. For example, a savings or insurance plan can be characterized by a specification since the terms of the plan and/or the annual yield can define the product the shopper desires to buy are more important to a shopper than the service provider name.

It will be appreciated that a specification can also include a choice of manufacturers. As such, a product offered can further be characterized by a group of manufacturers, such that the shopper is guaranteed that the product purchased thereby is supplied from one of the manufacturers listed (for example, a 20" color television manufactured by Sony, Phillips or Sanyo, etc.). A specification further characterized by a group of manufacturers is preferred in cases where the brand name or name of the service provider is important to the shopper.

It will be appreciated that shoppers groups characterized by specification type products are inherently advantageous because in this case such a product can be acquired from a plurality of competing suppliers and therefore these suppliers are more amenable to price negotiations.

A product according to the present invention can also refer to an option of purchasing a product. In this case, the user purchases an option at a price well below that of the product to which the option pertains, which option entitles the user to receive the product sometime in the future. Since such options are of a set value and since they enable holders thereof to purchase a product at a reduced aggregate shopping price, a user holding such an option may trade, sell or be entitled to a refund, according to the value of the option.

As further detailed hereinunder, the product purchasable by users of system **10** which are members of a shoppers group is typically supplied by a supplier **18** which forms a part of system **10**. As further detailed herein, such suppliers may be under contract with an operator of system **10**, or alternatively contacted by the operator to supply products at agreed upon conditions of purchase. Alternatively, and as is further detailed hereinunder, suppliers may also establish shoppers groups utilizing system **10** of the present invention.

As used herein in the specification and in the claims section that follows, the phrase "user client" includes, but is not limited to, personal computers (PC) having an operating system such as DOS, Windows™, OS/2™ or Linux™; Macintosh™ computers; computers having JAVA™-OS as the operating system; and graphical workstations such as the computers of Sun Microsystems™ and Silicon Graphics™, and other computers having some version of the UNIX operating system such as AIX™ or SOLARIS™ of Sun Microsystems™; a PalmPilot™, a PilotPC ™, Nokia Communicator™ or any other handheld device; or any other known and available operating system. The term further includes mobile cellular telephone devices and mobile cellular communicator devices having, in addition to telephone properties, capabilities similar.to those of a personal computer (PC) or a personal digital assistant (PDA).

Hereinafter, the term "Windows™" includes but is not limited to Windows95™, Windows 3.x™ in which "x" is an integer such as "1", Windows NT™, Windows98™, Windows2000™, Windows CE™ and any upgraded versions of these operating systems by Microsoft Inc. (Seattle, Washington, USA).

According to another preferred embodiment of the present invention client 14 is a personal computer operating a web browser program, such as, for example, Netscape Communicator™, Internet Explorer™, Opera™, iCab™, Mosaic™, and the like, in which case database 12 communicates with the World Wide Web and information pertaining to shoppers group is preferably included in a web site which is accessible to users via their user client.

According to another preferred embodiment of the present invention user client 14 is a television set operating a web browser program (i.e., Web-TV).

By using a web browser program, a user of system 10 can interactively access the information provided by database 12 via a web site, and also communicate information to database 12 via the web site. It will be appreciated that such two way communication between database 12 and a user operated web browser via a web site can be, for example, provided through common gateway interface (CGI).

Using CGI scripts the information included within database 12 can be ported to the World Wide Web via a web site interface in a manner which allows users to dynamically interact with the information. The

utilization of CGI scripts for such purposes is well known in the art of computers and as such no further detail is included herein.

According to another preferred embodiment of the present invention user client **14** is a personal computer operating a dedicated software program which is designed to specifically communicate and exchange information with database **12**.

According to the teachings of the present invention, a shoppers group maintained by database **12** can be established by one of several methods.

According to one preferred embodiment of the present invention the shoppers group is established by a user of system **10**, which shoppers group. is maintained by database server system **12** as described hereinabove. In such a case. the user defines the designated product and the conditions of purchase. It will be appreciated in this case that the defined product and conditions of purchase are so defined such that the chances of obtaining the product from a supplier are reasonably high.

As already mentioned hereinabove, an aggregate purchasing power rendered to such shoppers groups is also a function of the type of product characterizing the shoppers group. For example, in the case where a shoppers group is designated by a specification type product. the operator of system **10** can better negotiate for a price or force a supplier to commit to a price designated in the conditions of purchase characterizing this shoppers group since this product is available from a plurality of suppliers.

To ensure that users do not establish shopper groups which are characterized by a product and/or conditions of purchase which are not within reason, system **10** can monitor these groups so as to notify such users of unreasonable product and/or conditions of purchase information provided thereby. To this end, system **10** stores and catalogues information from various suppliers, such that information pertaining to product prices and conditions of purchase accumulated therein can be used to cross reference user provided information.

Alternatively a user can establish a shoppers group for a product which is listed by a catalogue provided by database **12**. In this case, an appropriate price range for the product is provided by database **12**.

According to another preferred embodiment of the present invention, the shoppers group is established by database server system

12.   In this case an operator of system **10** can establish any number of shopper groups, each characterized as further described hereinabove.

It will be appreciated in this case that designated products and conditions of purchase which characterize each shoppers group can be selected by the operator of system **10** according to parameters effected by product popularity and or availability from suppliers, in which case, once a shoppers group is established and users join up the operator can negotiate with a supplier or suppliers for the best price and/or other purchase conditions.

Alternatively and preferably the operator may sign an agreement with a supplier or suppliers which requires the supplier(s) to commit to a price, which price can be, for example, a function of a preset number of members of a shoppers group. In this case, database **12** maintains a catalogue of products available from suppliers, which products are used to establish groups according to the operator's discretion.

According to another preferred embodiment of the present invention, the shoppers group is established by a supplier. To establish a shoppers group a supplier may be provided with a supplier client **18** which is similar in function to user client **14**.

Alternatively, a supplier can establish a shoppers group by simply providing operator of system **10** with appropriate information via facsimile, telephony or electronic mail.

It will be appreciated that this configuration of system **10** is advantageous since it essentially links suppliers and shoppers while providing shoppers with the benefits gained from aggregate shopping and providing suppliers with the ability to greatly increase their market share. In addition, since in this configuration an operator of system **10** functions in linking supply and demand, such an operator is freed from the need to approach or to contract specific suppliers.

System **10** of the present invention preferably simultaneously implements all three shoppers group establishment configurations described hereinabove.

As such, system **10** of the present invention enables an operator thereof to cross reference between supplier established groups and user established groups so as to optimally match between supply and demand. For example, members of a shoppers group designated by a specific product can be alerted by system **10** of a supplier group which is offering an identical or a similar product. In this case system **10** can provide

members with details of the product offered by the supplier so as to enable these members, in cases where it is advantageous thereto, to abandon their shoppers group and join the supplier group. This process can be done automatically by the system in cases where the user has agreed in advance or upon request for such an action.

Thus the present invention, enables shoppers to enjoy the benefits provided by aggregate shopping while enabling suppliers to dramatically increase their sales. In addition since the present invention accumulates shopper demands, additional benefits may be realized by for example pooling product demands of several shopper groups into a single supplier demand thus increasing a demand volume presented to a single supplier and therefore further increase shopper savings.

It will be appreciated that in the case where a shopper is a business entity, system 10 of the present invention can serve as a forum for business to business transactions.

Finally, since the system of the present invention processes shopper demands statistical data on the popularity of products and the shopping habits of individual shoppers can be generated.

For example statistical data pertaining to the demand for particular items can be forwarded by the system of the present invention to suppliers. This information can assist suppliers in better planning inventories. In addition the shopping habits of shoppers can be tracked so as to yield a shopping profile for each shopper. Statistical information generated can then include, for example, products most preferred by a shopper and the like. It will be appreciated that the shopping profile information of a shopper can be used to notify such a shopper of upcoming establishment of shopper groups of interest. Furthermore, statistical data compiled and extracted from the shopping profiles of numerous shoppers can be used to provide products which are in demand by the users.

Additional objects, advantages, and novel features of the present invention will become apparent to one ordinarily skilled in the art upon examination of the following example, which is not intended to be limiting. Additionally, each of the various embodiments and aspects of the present invention as delineated hereinabove and as claimed in the claims section below finds support in the following example.

EXAMPLE

Reference is now made to the following example, which together with the above descriptions, illustrate the invention in a non limiting fashion.

General background

The general idea underlying the present invention is the recognition that the tremendous developments in the computer and communications technologies are being utilized in a very limited scope in commerce in general and in sales and marketing of consumer goods in particular, especially in enabling shoppers to enjoy the advantages afforded by aggregate shopping of products. Incorporation of electronic communication technologies into retail shopping should significantly change and expand the retail process as it is known today.

General description of the invention

The system of the present invention combines hardware and software to create an environment for shoppers and suppliers in which the benefits of aggregate shopping are realized for both shoppers and suppliers. The system of the present invention stores and analyses input from both shoppers and/or suppliers, and functions to match between the supply and demand factors (best matching).

The ability of the system to analyze and match inputted data in real time creates a distinct advantage in this case. By enabling users to establish or join a shoppers group in real-time it essentially amasses a group of people which share nothing in common other than the interest in a specific product.

The system of the present invention accumulates demands for a specific product from a group of shoppers to thereby provide each shopper with advantages inherent to aggregated shopping. Demand means the offer by potential shoppers to purchase a designated product at defined purchase conditions (price, availability, terms of payment and the like). Since the system of the present invention system forms a shopper groups, it enables the shopper members thereof to obtain better purchasing conditions from suppliers. Thus, the system of the present invention gathers individual shoppers into groups thus providing them with "bargaining power" while allowing each individual to enjoy the benefits of the group. In addition, since the system of the present

invention can co-maintain a plurality of shoppers groups, accumulation of demand from several groups can further increase the buying power of shoppers.

The system will also enable suppliers to make offers suited for large volume buying thus making it possible for the suppliers to sell with a lower profit margin per item.

TAD and combining demands

The system of the present invention also creates a new data entity referred to herein as Total Accumulated Demand (TAD).

For example, when dealing with a single supplier the system of the present invention can combine all the individual demands of shoppers of various shoppers group at a given moment into one unified offer. The unification of demands can be effected in several ways, thus TAD will enable the system of the present invention to generate different supply and demand statistics.

For example - if the TAD includes 20 VCRs Model X, 50 VCRs model Y. 30 TV sets model Z. then an electronic appliance supplier which is either under contract with the operator of the system of the present invention or is approached by the operator is presented with a total accumulated demand of 100 electrical appliances.

The demands of various shopper groups can be organized into various TAD combinations which can be presented to various suppliers in order to maximize savings. In addition suppliers presented with TADs will be able to plan and target their product offers so as to accommodate this specific demand architecture.

Information provided by the system

For the system of the present invention to function properly at least two things should be defined and agreed upon. The product designated should be defined and a set of rules and a commercial agreement to which both the shoppers and the suppliers should agree to and act in accordance with must be drafted.

It is necessary to describe the product in a clear and definitive manner in order to optimize the operation of the system of the present invention. A product which is not described accurately is not likely to be readily purchased by present day consumers. Presently, suppliers advertise (through electronic communication mediums) different

products under different descriptions and names even though in many cases the product sold by the various suppliers is identical. The lack of a universal description prevents "smart agents" from performing their searches in an efficient and rapid manner.

5   The system of the present invention will present users with a catalogue which will list all the goods and services available for sale. The description and data will be in standard form (prearranged). The information will be available in text and, to the extent possible, in graphic form (such as pictures, graphs, video etc.). The goods/services

10 can be divided into three levels and with every item included in one or more categories. The specifications of the products will rely primarily on the data given by the manufacturer of the product.

The system may also provide additional information on products, which information will be generated by the operator of the system and

15 will include unbiased information on the product. In addition, users may be urged to contribute reviews of products purchased thereby.

The system will enable users to access catalog and any additional information through either menu browsing or through keyword search

20   *The agreement*

The agreement includes a group of terms and conditions under which the system will operate. These terms will define the relations between the buyers/shoppers and the sellers/suppliers and the obligations the two sides take upon themselves when entering into the agreement.

25 The agreement will also define the role of the system as an intermediary between the two sides.

The agreement will explain in general terms the commercial principles of the system and the standards and criteria's according to which it operates. It will be appreciated that a user wishing to join or

30 setup a shoppers group will need to submit personal profile information, such as mode of payment and will need to confirm that they have read the agreement and the specific rules of the group and that they agree to the terms and conditions of the agreement and the group.

35   *Transactions*

There are four main processes governing aggregated purchasing of products via the system of the present invention, the reversed tender, the

on-line tender, sellers mode and a tender for a one of a group of products or a tender for a product defined by a specification.

The Reversed Tender:

As the name indicates - it is a tender where the suppliers bid to answer the overall demand, and the winner is the supplier which offers the best conditions of purchase. It will be appreciated that several suppliers can be combined to meet the demands of a single shoppers group, in which case, such suppliers conform to the conditions set by the group.

The system generates "virtual demand rooms" each corresponding to a shoppers group. In each and every "room" demand data for one specific defined product that appears in the catalogue is gathered.

Every "virtual demand room" will supply the following data: (i) the maximum price to be paid for the product offered in the room; (ii) the current and updated demand - the overall demand in the room at each point in time; (iii) the last date/time for submitting proposals by shoppers i.e. the last date/time for joining a shoppers room; (iv) the last date / time for submitting supplier bids; (v) the date/time of publishing the results of the tender and the winning supplier bids.

Every room, and as such every shoppers group will have its own set of rules which can vary according to the specific product.

The general terms and rules which apply to all shopper groups include - the final price will never exceed the prescribed maximum price; a shopper who joined a shoppers group must purchase the product if all the predefined conditions are fulfilled.

The system is not obligated to supply the product to all the members of the shoppers group. If for example 1000 demands were registered but only 900 items are available, then the first 900 users to join the group are entitled to purchase the products.

Customizing the Tender: The customizing process is a computerized process that will enable the system to allow suppliers to choose the goods and/or services that they wish to receive the TAD for. This process will simplify and narrow the number of requests sent to potential suppliers and will make sure that the suppliers in the system will receive the TAD relevant to the products and/or services they wish to sell.

Submission of Proposals: Each supplier who wishes to participate in bidding for a supplied product or TAD will first have to fill out a

specific form. Prior to participation a supplier will have to agree to the general terms of the agreement and to the specific terms of the group in question. The proposal by the supplier can be for the supply of the entire or a part of the TAD (both for a specific product or a group of products).

Different Formats of Proposals: Suppliers will be able to choose from different formats of proposals. Various proposal formats will enable the suppliers to adjust their proposals accordingly.

The formats available to the suppliers can include for example, (i) proposal for a given number of products at a given price, for example - 100 televisions model X at 70$ per unit; (ii) a "progressive" proposal (as shown in Table 1) whereby the price per unit is a function of the number of units.

Table 1 - progressive proposals

Product	Number of Units	Price Per Unit
TV Model X	1	70$
TV Model X	2-9	64$
TV Model X	10-50	55$

Other formats include: (iii) a progressive discount per unit wherein a maximum and minimum number of units is predetermined by the system and the supplier offers a discount per unit, for example: max. - 100, min. 20, if the proposed price for 20 units is $65 per unit, the offer will state that for every additional 5 units the supplier will give a discount of 2% (translating into a 44.2$ per unit price for 100 units); (iv) a general proposal for a group of products - for example : 100 TVs model X and 50 VCRs model Y at $21,000. This proposal is for the "entire package" and is indivisible; (v) progressive discount as a function of the volume - for example, if the volume of the transaction will exceed $10,000 pre-discount, a 15% discount will be given.

At the last date/time for proposals the system will perform the "Best Match" process. This process enables to achieve the best matches for the demand and supply data stored by the system. In general terms, the system will grade the compatibility between the different proposals and the TAD and the proposal which receives the highest grade wins. It should be clarified that the proposal which is the winner may only cover

portion of a TAD or demand for a single product from a single shoppers group. Thus, there may be additional winners for other portions TADs or groups.

Different considerations are weighed while evaluating and scoring proposals. The system will calculate not only the price, but other factors such as volume, terms of payment, reliability of the supplier etc. Determining the criteria and their weight will be a learned experience which will be fine tuned with .

The Closing of the Tender: After the evaluation and scoring process is completed, the transactions will take place and the shoppers and the suppliers will be informed of the results.

The On-line Tender:

The on-line tender is an additional process of uniting demand and matching the TAD to a sophisticated supply evaluating mechanism (the "Best Match" logic). The concept of this process is that suppliers submit the quantities and prices before they receive the TAD. This process is different from the process described above (in the reversed tender) due to the fact that the suppliers make their offer before they know the TAD. From the shoppers perspective this tender guarantees a fixed price for a product for a given quantity of this product.

In order to make this process possible, the system must be able to evaluate the TAD at every given moment in order to run a comparison with the supply data provided. This evaluation process is necessary in order to cover demands, the system must make sure that it does not accept demands that can not be matched by proposed supplies.

For the system to be able to create compatibility between supply and demand, it must be able to evaluate the supply data at every given moment. The way to ensure the compatibility of supply and demand is by using the "Price List".

The Price List: The Price List enables suppliers to propose bids which can be evaluated on-line. A price list can apply to a single product, a price per unit for a range of quantities, a total price for a given quantity ($5,000 for 100 TVs, model X), a total price for a specific quantity of a group of products, a progressive discount per quantity or a progressive discount per volume of the deal.

The supplier must produce information regarding the total number of units of the product(s) carried in stock. This information is necessary for the evaluation of validity of the price list in regards to the supplier.

Sellers Mode:

In the sellers mode the suppliers are the initiators of the proposals, i.e. the suppliers establish the shoppers group. This mode is especially useful for suppliers who wish to sell large volumes of a product.

Thus a supplier may propose the following: a television set Model X at $40 a unit, conditional on a demand for 50 units until 16:00, today, etc.

A tender for a one of a group of products or a tender for a product defined by a specification:

The logic behind this process is that in many cases a shopper knows the specification of the product he/she wants to purchase, but he is willing to buy one of a group of products which fulfill this desired specification. For example if a shopper wishes to purchase a color television set with a 20" screen the system will form an open tender which will be submitted to manufacturers or suppliers of televisions complying with this specification. These manufacturers can either be specified, in which case the shopper knows a head of time that the television is to be purchased from a manufacturer included within a group of manufacturers specified by either the system or the shopper, or alternatively manufacturers are not specified. The system will evaluate the offers and decide on the best offer in accordance with the specification of the group, following which the deal is finalized

Hardware/software architecture

The system of the present invention operate as a hardware software system that will operate from a single computer or a Network of computers. A data base of an existing type will operate within the system (e.g., ORACLE SQL SERVER). The shoppers and suppliers will connect to the system through the Internet and/or any other communications modes available.

The software system will include several software modules as follows:

Communications with shoppers module: This module will enable the shoppers to browse the catalogue, to view the various supplier offers (sellers mode) and to join a shoppers group characterized by a specific demand. This module can also deliver the final results to the Shoppers.

Communications with suppliers module: This module will enable the suppliers to propose bids to the various shopper groups and to make

proposals in the Sellers Mode. This module will also deliver the final results to the suppliers.

A module for configuration of the algorithm to resolve the "Best Match": This module will unify the demands of the various
5 processes, the evaluation of the proposals, and the determination of the Best Matches.

In addition a software module for linking the data base to the other modules, a module for the management of the Price Lists and other system parameters and a module for maintenance and backup of the
10 system will also be incorporated into the system of the present invention.

Several tables will be implemented by the database utilized by the system of the present invention.

A suppliers table: which includes general information about the suppliers registered in the system.
15 *A catalogue table:* which includes information about the products offered by the system.

A price list table: which includes information on the various prices offered by suppliers to some or all of the products of the catalogue.

A buyers table: which includes information on the shoppers or
20 potential shoppers.

A demands table: which includes information about the various shopper groups and which will be linked to the buyers table.

A sellers mode table: which includes all the various sellers mode offers.
25 Thus the system of the present invention enables both shoppers and suppliers to enjoy the benefits provided by aggregate shopping of products, which benefits include enhanced purchasing conditions to the shopper and wide distribution and a large volume of sales to the supplier.

30 Although the invention has been described in conjunction with specific embodiments thereof, it is evident that many alternatives, modifications and variations will be apparent to those skilled in the art. Accordingly, it is intended to embrace all such alternatives, modifications and variations that fall within the spirit and broad scope of the appended
35 claims.

WHAT IS CLAIMED IS:

1. A system for facilitating aggregate shopping, the system comprising:

(a) a database server system being for maintaining at least one shoppers group, said at least one shoppers group being characterized by a designated product and conditions for purchasing said designated product; and

(b) a plurality of user clients, being at a disposal of a plurality of users and being capable of communicating with said database server system, each of said plurality of user clients being for enabling a respective user thereof to join said at least one shoppers group, such that a user of said plurality of users is entitled to purchase said designated product under said conditions for purchasing said designated product upon joining said at least one shoppers group.

2. The system of claim 1, wherein said at least one shoppers group is established by a user of said plurality of users.

3. The system of claim 1, wherein said at least one shoppers group is established by an operator of said database server system.

4. The system of claim 1, wherein said at least one shoppers group is established by a supplier of said designated product.

5. The system of claim 1, wherein said plurality of user clients communicate with said database server system via a communication mode selected from the group consisting of dialup communication and local area network communication.

6. The system of claim 1, wherein said at least one shoppers group is maintained by said database server system for a predetermined period of time.

7. The system of claim 6, wherein said user can join said at least one shoppers group only during said predetermined period of time

8.   The system of claim 6, wherein a user is entitled to purchase said designated product following termination of said predetermined time period.

9.   The system of claim 6, wherein said conditions for purchasing said designated product are determined as a function of the number of members within said at least one shoppers group at any time point either during said predetermined time period, or following termination of said predetermined time period.

10.   The system of claim 1, wherein said database server system stores and provides on demand to each of said user clients information pertaining to said at least one shoppers group.

11.   The system of claim 10, wherein information pertaining to said at least one shoppers group includes information on said designated product and to said conditions for purchasing said designated product.

12.   The system of claim 10, wherein information pertaining to said at least one shoppers group includes informatio__n on a number of members of said at least one shoppers group.

13.   The system of claim 12, wherein information pertaining to said at least one shoppers group includes information on each member of said members of said at least one shoppers group.

14.   The system of claim 1, whersaid conditions for purchasing said designated product include price of said designated products and terms of payment.

15.   The system of claim 1, wherein said designated product is a specific product from a specific manufacturer.

16.   The system of claim 1, wherein said designated product is a service.

17.   The system of claim 1, wherein said designated product is characterized by a specification.

18. The system of claim 1, wherein said designated product includes a plurality of specific products bundled together as a single product package.

19. The system of claim 1, wherein each of said plurality of user clients is a computer operating a web browser and further wherein said database server system is in communication with the World Wide Web.

20. The system of claim 1, wherein each of said user clients is a computer operati a dedicated software program.

21. The system of claim 2, wherein said at least one shoppers group is maintained by said database server system for a predetermined period of time.

22. The system of claim 21, wherein said user can join said at least one shoppers group only during said predetermined period of time.

23. The system of claim 21, wherein said user of said plurality of users is entitled to purchase said designated product following termination of said predetermined time period.

24. The system of claim 2, wherein said conditions for purchasing said designated product are determined as a function of the number of members within said at least one shoppers group at any time point.

25. The system of claim 2, wherein said database server system stores and provides on demand to each of said user clients information pertaining to said at least one shoppers group.

26.   The system of claim 25, wherein information pertaining to said at least one shoppers group includes information on said designated product and to said conditions for purchasing said designated product.

27.   The system of claim 25, wherein information pertaining to said at least one shoppers group includes information on a number of members of said at least one shoppers group at any given time point.

28.   The system of claim 27, wherein information pertaining to said at least one shoppers group includes information on each member of said members of said at least one shoppers group.

29.   The system of claim 2, wherein said conditions for purchasing said designated product include price of said designated product and terms of payment.

30.   The system of claim 2, wherein said designated product is a specific product from a specific manufacturer.

31.   The system of claim 2, wherein said designated product is a service.

32.   The system of claim 2, wherein said designated product is characterized by a specification.

33.   The system of claim 2, wherein said designated product includes a plurality of specific products bundled together as a single product package.

34.   The system of claim 2, wherein each of said user clients is a computer operating a web browser and further wherein said database server system is in communication with the World Wide Web.

35.   The system of claim 2, wherein each of said user clients is a computer operating a dedicated software program.

36. The system of claim 3, wherein said at least one shoppers group is maintained by said database server system for a predetermined period of time.

37. The system of claim 36, wherein said user of said plurality of users can join said at least one shoppers group only during said predetermined period of time.

38. The system of claim 36, wherein said user of said plurality of users is entitled to purchase said designated product following termination of said predetermined time period.

39. The system of claim 3, wherein said conditions for purchasing said designated product are determined as a function of the number of members within said at least one shoppers group at any time point.

40. The system of claim 3, wherein said database server system stores and provides on demand information pertaining to said at least one shoppers group.

41. The system of claim 40, wherein information pertaining to said at least one shoppers group includes information on said designated product and to said conditions for purchasing said designated product.

42. The system of claim 40, wherein information pertaining to said at least one shoppers group includes information on a number of members of said at least one shoppers group at any given time point.

43. The system of claim 42, wherein information pertaining to said at least one shoppers group includes information on each member of said members of said at least one shoppers group.

44. The system of claim 3, wherein said conditions for purchasing said designated product include price of said designated products and terms of payment.

45.   The system of claim 3, wherein said designated product is a specific product from a specific manufacturer.

46.   The system of claim 3, wherein said designated product is a service.

47.   The system of claim 3, wherein said designated product is characterized by a specification.

48.   The system of claim 3, wherein said designated product includes a plurality of specific products bundled together as a single product package.

49.   The system of claim 3, wherein each of said user clients is a computer operating a web browser and further wherein said database server system is in communication with the World Wide Web.

50.   The system of claim 3, wherein each of said user clients is a computer operating a dedicated software program.

51.   The system of claim 4, wherein said at least one shoppers group is maintained by said database server system for a predetermined period of time.

52.   The system of claim 51, wherein said user of said plurality of users can join said at least one shoppers group only during said predetermined period of time.

53.   The system of claim 51, wherein said user of said plurality of users is entitled to purchase said designated product following termination of said predetermined time period.

54.   The system of claim 4, wherein said conditions for purchasing said designated product are determined as a function of the number of members within said at least one shoppers group at any time point.

55. The system of claim 4, wherein said database server system stores and provides on demand to each of said user clients information pertaining to said at least one shoppers group.

56. The system of claim 55, wherein information pertaining to said at least one shoppers group includes information on said designated product and to said conditions for purchasing said designated product.

57. The system of claim 55, wherein information pertaining to said at least one shoppers group includes information on a number of members of said at least one shoppers group at any given time point either during said predetermined time period, or following termination of said predetermined time period.

58. The system of claim 57, wherein information pertaining to said at least one shoppers group includes information on each member of said members of said at least one shoppers group.

59. The system of claim 4, wherein said conditions for purchasing said designated product include price of said designated products and terms of payment.

60. The system of claim 4, wherein said designated product is a specific product from a specific manufacturer.

61. The system of claim 4, wherein said designated product is a service.

62. The system of claim 4, wherein said designated product is characterized by a specification.

63. The system of claim 4, wherein said designated product includes a plurality of specific products bundled together as a single product package.

64. The system of claim 4, wherein each of said user clients is a computer operating a web browser and further wherein said database server system is in communication with the World Wide Web.

65.   The system of claim 4, wherein each of said user clients is
a computer operating a dedicated software program.

66.   The system of claim 4, wherein said supplier communicates
with said database server system via a supplierclient.

.67.   The system of claim 66, wherein said supplier client is a
computer operating a web browser and further wherein said database
server system is in communication with the World Wide Web.

68.   The system of claim 66, wherein said supplier client is a
computer operating a dedicated software program.

69.   A method of facilitating aggregate shopping, the method
comprising the steps of:

(a)   establishing at least one shoppers group in a database server
system;

(b)   maintaining said at least one shoppers group in said
database server system, said at least one shoppers group
being characterized by a designated product and conditions
for purchasing said designated product; and

(c)   enabling a plurality of users each being capable of
communicating with said database server system via a user
client thereof to join said at least one shoppers group, such
that upon joining, each user is entitled to purchase said
designated product under said conditions for purchasing
said designated product.

70.   The method of claim 69, wherein said step of establishing
said at least one shoppers group is effected by a user of said plurality of
users.

71.   The method of claim 69, wherein said step of establishing
said at least one shoppers group is effected by an operator of said
database server system.

72. The method of claim 69, wherein said step of establishing said at least one shoppers group is effected by a supplier of said designated product.

73. The method of claim 69, wherein said step of maintaining said at least one shoppers group is executed for a predetermined period of time.

74. The method of claim 73, wherein a user of said plurality of users can join said at least one shoppers group only during said predetermined period of time.

75. The method of claim 73, wherein a user of said plurality of users is entitled to purchase said designated product following termination of said predetermined time period.

76. The method of claim 69, wherein said conditions for purchasing said designated product are determined as a function of the number of members within said at least one shoppers group at any time point

77. The method of claim 69, wherein said database server system stores and provides on demand to each user information pertaining to said at least one shoppers group.

78. The method of claim 77, wherein information pertaining to said at least one shoppers group includes information on said designated product and to said conditions for purchasing said designated product.

79. The method of claim 77, wherein information pertaining to said at least one shoppers group includes information on a number of members of said at least one shoppers group at any given time point.

80. The method of claim 79, wherein information pertaining to said at least one shoppers group includes information on each member of said members of said at least one shoppers group.

81. The method of claim 69, wherein said conditions for purchasing said designated product include price of said designated products and terms of payment.

82. The method of claim 69, wherein said designated product is a specific product from a specific manufacturer.

83. The method of claim 69, wherein said designated product is a service.

84. The method of claim 69, wherein said designated product is characterized by a specification.

85. The method of claim 69, wherein said designated product includes a plurality of specific products bundled together as a single product package.

86. The method of claim 69, wherein said user client is a computer operating a web browser and further wherein said database server method is in communication with the World Wide Web.

87. The method of claim 69, wherein said user client is a computer operating a dedicated software program.

88. The method of claim 72, wherein said supplier communicates with said database server system via a supplier client thereof.

89. The method of claim 88, wherein said supplier client is a computer operating a web browser and further wherein said database server method is in communication with the World Wide Web.

90. The method of claim 88, wherein said supplier client is a computer operating a dedicated software program.

ABSTRACT OF THE DISCLOSURE

A system for facilitating aggregate shopping is disclosed. The system comprises (a) a database server system being for maintaining at least one shoppers group, the at least one shoppers group being characterized by a designated product and conditions for purchasing the designated product; and (b) a plurality of user clients, being at a disposal of a plurality of users and being capable of communicating with the database server system, each of the plurality of user clients being for enabling a respective user thereof to join the at least one shoppers group, such that a user of the plurality of users is entitled to purchase the designated product under the conditions for purchasing the designated product upon joining the at least one shoppers group.

18

10

Supplier client

12

Database server system

16
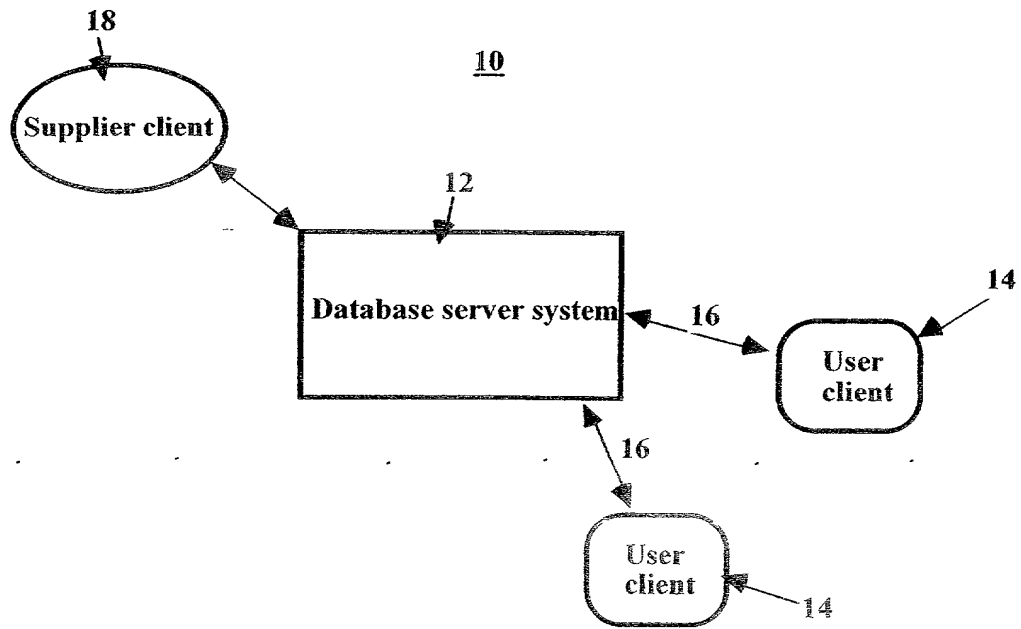
14

User client

16

User client

14

Figure 1

Combined Declaration For Patent Application and Power of Attorney

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled   SYSTEM AND METHOD FOR FACILITATING AGGREGATE SHOPPING,   the specification of which (check one)   ☒ is attached hereto.

☐ was filed on   as Application Serial No.   and was amended on   . I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)			Priority Claimed	
IL99/00650	PCT	1-Dec-99	☒	☐
(number)	(Country)	(Day, Month, Year Filed)	Yes	No
			☐	☐
(number)	(Country)	(Day, Month, Year Filed)	Yes	No
			☐	☐
(number)	(Country)	(Day, Month, Year Filed)	Yes	No

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States Application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

60/110,597	2-Dec-98	pending
(Application Serial No.)	(Filing Date)	Status
		(patented, pending, abandoned)
(Application Serial No.)	(Filing Date)	Status
		(patented, pending, abandoned)

I hereby appoint the following attorneys, with full power of substitution, association, and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Mark M. Friedman   Registration No. 33,883
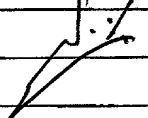
Address all Correspondence to:
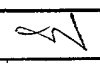
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Attorney Docket: 1905/2
page 2 of 2

Continuation of Combined Declaration For Patent Application and Power of Attorney

     I hereby further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statement may jeopardize the validity of the application of any patent issued thereon.

*FULL NAME OF SOLE OR FIRST INVENTOR	INVENTOR'S SIGNATURE	DATE
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POST OFFICE ADDRESS		
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POST OFFICE ADDRESS		
3 CFAR TRUMAN 73150, ISRAEL		

*FULL NAME OF THIRD INVENTOR	INVENTOR'S SIGNATURE	DATE
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	ISRAELI	
POST OFFICE ADDRESS		

*FULL NAME OF FOURTH INVENTOR	INVENTOR'S SIGNATURE	DATE
RESIDENCE	CITIZENSHIP	
	ISRAELI	
POST OFFICE ADDRESS		

*FULL NAME OF FIFTH INVENTOR	INVENTOR'S SIGNATURE	DATE
RESIDENCE	CITIZENSHIP	
	ISRAELI	
POST OFFICE ADDRESS		

*FULL NAME OF SIXTH INVENTOR	INVENTOR'S SIGNATURE	DATE
RESIDENCE	CITIZENSHIP	
	ISRAELI	
POST OFFICE ADDRESS		

*FULL NAME OF SEVENTH INVENTOR	INVENTOR'S SIGNATURE	DATE
RESIDENCE	CITIZENSHIP	
	ISRAELI	
POST OFFICE ADDRESS		